

⇒ Eye tracking

Background

Historically eye-tracking equipment was cumbersome, difficult to calibrate, fairly unreliable and it would not work for people wearing glasses or thick mascara. It has, however, improved significantly in recent years. It is now reliable (people can look away from the screen without disturbing the results), unobtrusive (you do not need to wear any special headgear) and works with most people (including those who like to wear lashings of mascara).

Why and when

WUP recommends the use of eye tracking for the usability testing - with PCs, tablets and mobile devices - as this provides greater insights into users' behaviours.

The new technology enables eye tracking to be used alongside 'real time think aloud' and 'retrospective think aloud' usability testing; Unlike earlier models it is possible to use the real time think aloud research approach because the eye tracker 'finds' the tester's eyes when they look away and then back at the screen. It is possible to observe the eye tracking in real time using 'Liveviewer' - so observers can see and hear testers, watch what they are looking at, and see the eye tracking overlaid on the screen as it happens.

Eye tracking in real time shows precisely what the user is looking at. There is far less doubt about which screen elements are being looked at or have been noticed. This can add significantly to the understanding of the usability issues on a website. This is particularly valuable when a testing session, or a video of it, is being viewed by a client as it makes explicit, without explanation, the usability issues affecting a site.

The other major area where eye tracking is valuable is when trying to assess the effectiveness of a specific page or the design and location of elements on a page - for

example when comparing two versions of a design e.g. promotions, navigation bars etc.

Significant additional insight can be gained by watching the users' gaze paths in real time - and real value can be gained from small sample sizes e.g. 3-5 testers. The important thing is being able to see in real time exactly where testers are looking.

However, we do not recommend producing heat maps from eye tracking data as we do not believe these add value to the type of research we undertake:

Heat maps are the aggregated gaze plots of a number of users, for a particular page. But these can be misleading. Where a user looks on a page is highly context specific, depending on the tasks and user journeys the user is pursuing. Without this contextual understanding it is not possible to accurately interpret heat maps - does a long fixation mean that someone is looking at something because it is interesting to them, or because it's very confusing and they're having to spend time making sense of it?

Equipment

We have the latest in eye tracking equipment - a Tobii T60 - which is ideal for PC based eye tracking studies, and a Tobii X120 for testing with tablets and mobile devices

Outputs

The standard outputs are recordings of the test sessions that show the screen being viewed overlaid with the eyetracking trace, a head shot of the tester (PC testing only) and the audio.

Fees

The additional cost for eye tracking is agreed on a project basis depending on the number of testers.